#### (19) World Intellectual Property Organization International Bureau

8 June 2006 (08.06.2006)



# 

## (43) International Publication Date

### (10) International Publication Number WO 2006/060642 A2

- (51) International Patent Classification: F21V 7/00 (2006.01)
- (21) International Application Number:

PCT/US2005/043592

(22) International Filing Date:

2 December 2005 (02.12.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/632,689

3 December 2004 (03.12.2004) US

- (71) Applicant (for all designated States except US): ACU-ITY BRANDS, INC. [US/US]; 1170 Peachtree Street, NE, Suite 2400, Atlanta, GA 30309 (US).
- (72) Inventor; and
- Inventor/Applicant (for US only): ABDELSAMED, Yaser, S. [US/US]; 3400 Canyon Road, SE, Granville, OH 43023 (US).
- (74) Agent: CLARK, Conrad, J.; Clark & Brody, 1090 Vermont Avenue, N.W., Suite 250, Washington, DC 20005 (US).

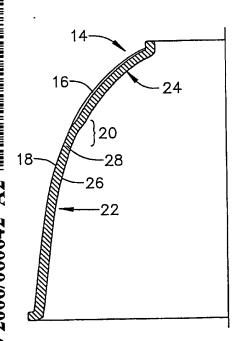
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### (54) Title: LUMINAIRE REFLECTOR HAVING IMPROVED PRISM TRANSITION



(57) Abstract: A reflector for a luminaire comprises a generally parabolic wall having series of main right-angled prisms and an interleaved series of transition prisms. The main and transition prisms have essentially the same shapes and follow the same overall curvature to control the illumination. The transition prisms transition into the main prisms by merging a peak of a transition prism into the valley between adjacent main prisms in a short transition zone. Thus, the transition zone has only a small effect on the overall lighting pattern.